BROOKLYN ARMY SUPPLY BASE, PIER 4
(U.S. Army Military Ocean Terminal, Pier 4)
58th-65th Street, 2nd Avenue
Brooklyn
Kings County
New York

HAER No. NY-202-D

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
Northeast Region
Philadelphia Support Office
U.S. Custom House
200 Chestnut Street
Philadelphia, P.A. 19106

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HISTORIC AMERICAN ENGINEERING RECORD

BROOKLYN ARMY SUPPLY BASE, PIER 4
(U.S. Army Military Ocean Terminal, Pier 4) HAER No. NY-202-D

Location:	Brooklyn Army Terminal Complex 58th - 65th Street, 2nd Avenue Brooklyn Kings County, New York UTM: 18/582050/4500040 Quad: Jersey City, NJ - NY, 1:24,000
Date of Construction:	1918 - 1919/initial construction phase
Architect: Engineer: Contractor:	Cass Gilbert Post and McCord Turner Construction
Present Owner:	City of New York New York City Economic Development Corporation (EDC) 110 Williams Street New York, NY 10038
Present Use:	Vacant
Significance:	Pier Four was built during the original phase of construction of the Brooklyn Army Terminal (BAT), and was designed by Cass Gilbert. It was one of four piers at the terminal used by the U.S. Army to send troops and supplies to Europe on an emergency basis immediately after World War I and during World War II.
Project Information:	It is the present intention (1994) to rehabilitate Pier Four for use as a "Park-And-Sail Ferry Operation". The proposed ferry would provide passenger service from BAT Pier Four to Manhattan for bus and car commuters. As part of EDC's efforts to restore and upgrade the terminal, Han-Padron Associates, Consulting Engineers, were engaged to investigate the condition of the piers. According to these recent evaluations of the structure and sub-structure (1991; and follow-up reports conducted in 1992 and 1993), the deterioration of the pier has become so advanced that local collapses are imminent. Demolition is advised. Judith Saltzman Li/Saltzman Architects, P.C. Preservation Consultants 375 West Broadway New York, NY 10012

Summary Description of Pier 4 and Setting:

The Brooklyn Army Terminal (BAT) is a former military installation containing 97 acres; its original construction dates to 1918-1919. Originally known as The United States Army Military Ocean Terminal and the former New York Port of Embarkation, it is listed on the National Register of Historic Places. BAT was vacated by the U.S. Government in 1975 and was acquired by the City of New York in 1981. Pier 4, along with sister piers 2 and 3, are part of BAT and extend west toward Manhattan. The base is comprised of two warehouses, the piers 2, 3 and 4 with covered sheds (Pier 1 was uncovered), an administration building, a boiler house, a machine shop with garages and a storage yard with numerous railroad tracks and trucking areas.[1]

The BAT complex was the largest of five Army Supply Bases constructed, along the east and gulf coasts, on an emergency basis at the end of World War I. According to the National Register Nomination, "The complex played a vital role in the mass movement of military goods and troops immediately after World War I and throughout World War II... During World War II, it was one of the main points of debarkation for troops and supplies."[2]

The complex is on a 97.21 acre site, and the size and boundaries of the present site are those of the original development site. This particular site was selected because it was in a commercial waterfront area of sufficient size; it was located immediately adjacent to a deep water channel and it was immediately available. An investigation of the underlying soil conditions revealed the fact that it was possible to obtain excellent foundations for the warehouses as well as the piers.[3] In addition, the site was strategically located between, and directly connected to, existing railroad yards for the Pennsylvania and Long Island Railroads and the Bush Terminal Industrial Complex.[4]

Eleven of the existing nineteen structures are listed as "contributing" on the National Register nomination for the "U.S. Army Military Ocean Terminal." Eight of these contributing structures, including Piers 2, 3, and 4, were part of the initial construction campaign in 1918-1919. The cost of the initial construction was approximately $32,500,000.[5] Construction was authorized by the Department of the Army to facilitate the movement of material, and the transport of troops, to Europe. The base served the Army in this capacity until decommissioned in 1973, then served various governmental uses until 1975. It was turned over to the City of New York in 1981.

All work on the base was under the direction of the Construction Division of the U.S. Army. Planning and design services were provided by Mr. Cass Gilbert, one of the greatest architects of that period. Recognizable works of Mr. Gilbert are the Woolworth Building and the U.S. Custom House, both located in New York City. Mr. Gilbert commented on the architectural simplicity of the BAT design:

> "If it (the base) has in any respect been successful as a work of architecture (aside from its practical efficiency), it is because of its manifest simplicity. I have emphasized the importance of simplicity of outline and surface, and have decried the use of extraneous

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1 "United States Army Supply Base," *The Architectural Review* (January 1920): 1.
2 National Register Nomination (July 1983): 2.
3 "United States Army Supply Base," *The American Architect* (November 26, 1919): 652.
4 Ibid.
5 Nimmons, George C., "Modern Industrial Plants," *The Architectural Record* (date unknown): 277.

ornament, especially in industrial buildings, as out of character with the direct and practical purpose of such substrates."[6]

The BAT complex is one of the earliest examples of large-scale industrial design in a bold, modern language. The original buildings, the east facades of the two-story sheds on Piers 2, 3, and 4, and the connecting bridges from the second deck of the pier sheds to the adjacent warehouse structure, were all constructed of reinforced concrete. All of the structures conform to the overall stylistic plan used in development of the site. The construction techniques were innovative to that time period, in that they departed from the Beaux-Arts embellishments, and the use of more traditional materials such as brick. It was necessary to use reinforced concrete in lieu of structural steel, which was hard to acquire in large quantities at the time of construction (1918-1919).[7]

Aside from the Gilbert-designed reinforced concrete facade, which is located along the bulkhead wall at the inshore end of the piers, the construction of Piers 2, 3, and 4, is typical of piers built in New York Harbor early in the century. Pier 4's description and present condition is very similar to Piers 2 and 3. Pier 4 , along with Piers 2 and 3, were each 150 feet wide and extended 1300 feet out into the harbor, from the shoreline bulkhead wall.[8]

Each of the three enclosed piers was comprised of three basic parts: timber piles (the substructure), a concrete deck, and a two-story shed. Pier 4 was supported on timber piles driven into the harbor bottom and timber framing, which formed the substructure and support for the pier deck and shed. The reinforced concrete pier deck slab was supported directly by the timber framing, and in turn, on the timber piles. Each pier contained approximately 7,450 timber piles.[9] The two-story shed was 140 feet wide, 1240 feet long, and its greatest height was 60 feet. The pier shed elevations which faced Warehouse 'A' were concrete, which reflected the composition of the warehouse. The two story shed was steel frame construction with corrugated metal siding and metal cargo doors along the length . The columns supporting the pier shed framing were founded on unreinforced concrete footings. The column foundations and the pier deck substructure were independent of each other. The original drawings by Cass Gilbert documented the materials used. According to a side elevation, cement plaster finish with metal paneling was applied. There were vertical sliding doors for handling cargo. Metal windows utilized clear wire glass. Each floor was paved with asphalt block.[10] Railroad tracks ran down the length of the pier. A distinctive feature of BAT's piers was the connecting bridge that linked the second floor of each pier to Warehouse 'A'.

While the BAT complex was constructed on an emergency basis due to size and capacity of the facility, the design considered the long term effects of such a project on handling commerce at the Port of New York. Project planning also included the ultimate conversion of the warehouses into buildings for manufacture.[11] The layout of the complex provided an effective plan for receiving, storing, and transferring cargo from the rail yards, the warehouses and the piers. An outstanding feature of the base was the simplicity of the transportation facilities. The planning of the storage yards, streets, ramps, railroads, connecting bridges, and tunnels made it a practical achievement in freight handling.

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6 Gilbert, Cass, "Industrial Architecture in Concrete," *The Architectural Forum* (Sept. 1923): 85.

7 *The American Architect*: 655.

8 Han Padron Assoc., *Inspection & Structural Evaluation of Pier Nos. 1, 3, and 4*, (April 1991): 2.

9 *Inspection & Structural Evaluation of Pier Nos. 1, 3, and 4*, (April 1991): 2.

10 Gilbert, Cass, *Architectural Drawings no. P101A and P1001*, 1918.

11 *The American Architect:* 654.

Operations on the piers were unique in that direct access was provided, from upland storage areas and warehouses, to both the main pier deck and to the second floor of the pier shed.

Cargo could be loaded and/or offloaded onto the lower or upper deck level of the pier sheds. Ships gear was used to handle cargo to and from the lower deck. The cargo was landed on the apron (approximately 5 feet wide) provided by the difference between the width of the pier deck and the shed. Inside the shed, cargo was moved by battery operated mobile equipment (forklifts, dollies, etc.) for loading onto trucks and rail cars. The BAT complex had, on its own, extensive track and marshalling areas for rail cars with eventual access to main line service. On the piers rail access was provided over the full length of the shed. At the second deck level there was direct access to the warehouses via a bridge connecting to the third level of the warehouse. Cargo was handled on the pier to and from the warehouse using battery operated equipment. Cargo was transferred, between the vessel and the pier, using a combination of ships gear and burton frame system constructed along the face of the shed roof.[12] The use of chain falls was required to handle the cargo to or from the ship directly to the second deck. Cargo could also be moved between the lower and upper pier decks using one of six cargo elevators located on each pier. Up to 20 vessels could berth simultaneously at the piers[13].

During World War II, it is surprising to note that over 3,000,000 troops and 38,000,000 tons of supplies passed through this port during its principal use. [14] It was a remarkable feat at the time for the U.S. government to produce such an elaborate complex in the hopes for its future use, and for the future economic needs of the Brooklyn population.

Several minor alterations occurred at the pier over the years. An estimate of repairs was conducted by the Army in 1955; (the form is attached in the Supplemental Material Section). Inspections and condition studies were conducted for the City to insure proper maintenance. Technology developed; one elevator was replaced by a passenger escalator at Pier 4 .[15] With its close proximity to the water, weathering damaged areas along the piers. Most of the original metal cargo doors were removed after years of deterioration and replaced with metal roll-up doors. The fenders surrounding each pier were reconstructed. Areas at the concrete floor decking needed replacement.

The original buildings of the Brooklyn Army Terminal, including Pier 4, will be remembered as an early success in modern design, due to the confluence of ideas regarding emergency construction, practical efficiency, bold use of modern materials, simplicity in appearance, and efficient coordination between architect, engineer, and contractor.

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12 Han Padron Assoc., *Inspection & Structural Evaluation of Pier No. 4*, (October 1992): Attachment B: 1.

13 *The Architectural Review* (January 1920): 1.

14 National Register-Nomination Form: 6.

15 URS Company, *Suitability for Future Use & Assessment of Present Condition*, (June 25, 1982): 6.

SOURCES OF INFORMATION/BIBLIOGRAPHY:

HISTORIC VIEWS:

New York Historical Society Collection. "Unidentified Warehouses: Army Supply Base (Cass Gilbert and Hugh Ferriss renderings). New York City, New York: Clipping File Collection.

PUBLISHED AND UNPUBLISHED SOURCES:

Gilbert, Cass. "Industrial Architecture in Concrete." *The Architectural Forum,* vol. 39, no. 3, (September 1923): 83-86.

Han-Padron Associates, Consulting Engineers. *Inspection and Structural Evaluation of Pier No. 4: Brooklyn Army Terminal, Contract No. 9000.282, Assignment No. 4,* April 1991.

Han-Padron Associates, Consulting Engineers. *Inspection and Structural Evaluation of Pier No. 4: Brooklyn Army Terminal, Contract No. 9000.282, Assignment No. 4 (revised),* October 1992.

National Register of Historic Places - Nomination Form, under "United States Army Military Ocean Terminal." (July 1983): 1-7.

Nimmons, George C. "Modern Industrial Plants." *The Architectural Record,* date not known: 262-284.

"United States Army Supply Base." *The American Architect,* vol. 116, number 2292; (November 26, 1919): 651-660.

"United States Army Supply Base." *The Architectural Review,* vol. 10, number 1, (January 1920): 1-4.

INFORMATION NOT YET INVESTIGATED:

"Freight Handling at the Brooklyn Army Base." *Engineering News-Record 83* (September 18, 1919): 555-60.

REPORTS ON FILE AT NYC ECONOMIC DEVELOPMENT CORPORATION:

Jerome Haims Realty Inc.: Rental Appraisers and Consultants. "Appraisal Report of Rental Value of Pier Four - Brooklyn Army Terminal." March 1982.

Tippetts-Abbett-McCarthy-Stratton: Architects and Engineers. "Brooklyn Army Terminal: Physical Requirements for Pier Reuse." December 1979.

URS Company Inc. "Brooklyn Army Terminal: Piers No. 3 and No. 4: Suitability for Future Use and Assessment of Present Condition." June 1982.

FURTHER INFORMATION FOUND AT THE NEW YORK HISTORICAL SOCIETY:

In **Cass Gilbert List of Holdings**:

U.S. Army Supply Base
Brooklyn, New York 1920

- 1 volume letterbooks
- 13 packages blueprints
- Presentation Drawings: Stack 11, 11.86-11.113, 11.325-11.329

LOCATION OF LEGAL DESCRIPTION: Hall of Records, 31 Chambers Street, New York City.

SUPPLEMENTAL MATERIAL:

New York Historical Society Collection. "Unidentified Warehouses: Army Supply Base" (Cass Gilbert and Hugh Ferriss renderings, 1918). New York City, New York: Clipping File Collection.

Brooklyn Historical Society Collection. Brooklyn Photographs: under "Army - Supply Bases" (Clippings from *Architecture and Building*, no date) Brooklyn New York: Visual Collection.

"United States Army Supply Base." *The Architectural Review*, vol. 10, number 1, (January 1920): pages 2, 4, plates I and II.

Letters: regarding Pier Shed Roofing, from Cass Gilbert/Gunvald Aus Company, (June 1918): 1-2.

Letter: to the Constructing Quartermaster, from Construction Division, (June 1918): 1-2.

DA AGO Form 5-25; "Individual Project Estimate - Repairs and Utilities" for New York Port of Embarkation - Brooklyn Army Base; Request no. 23-55, Detail Acct. no 3532.2; February 7, 1955: 1-3.

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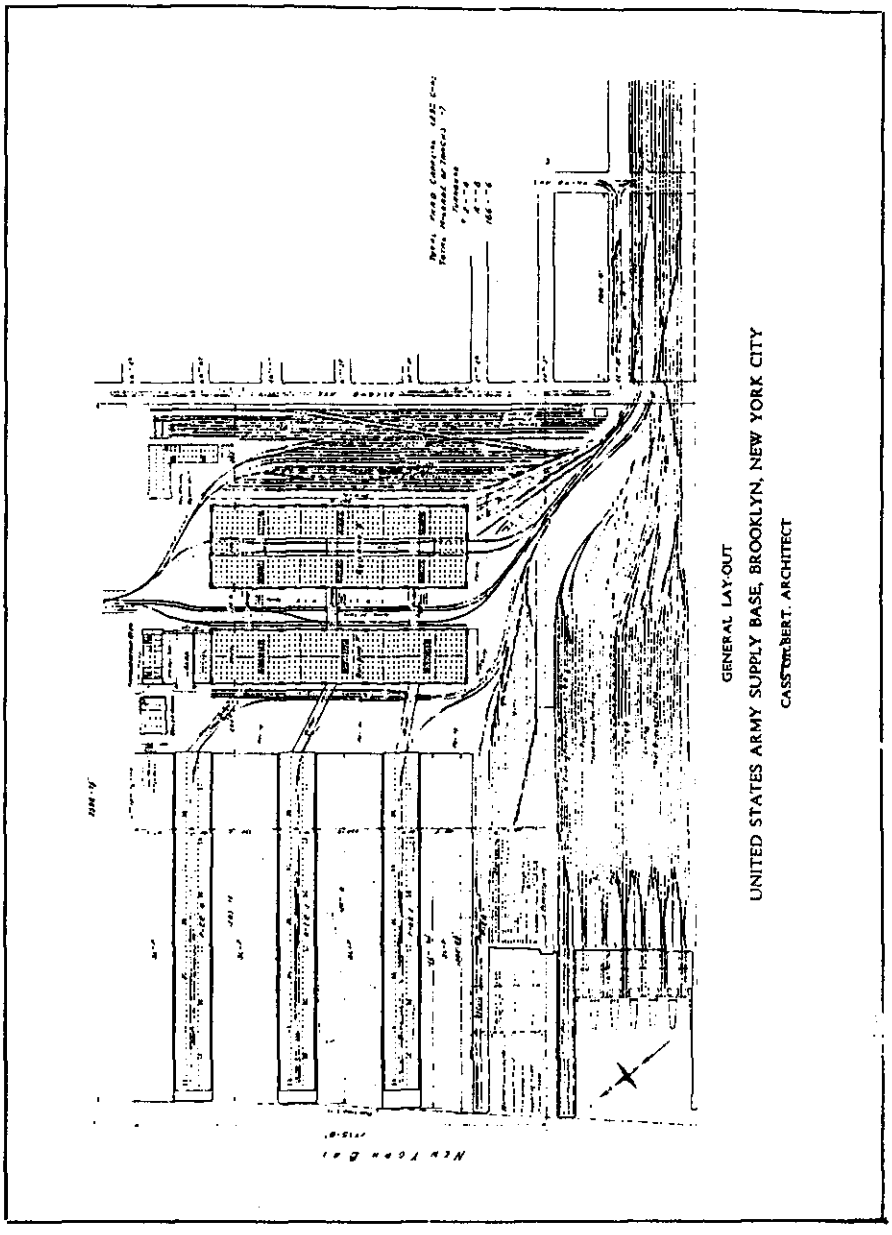
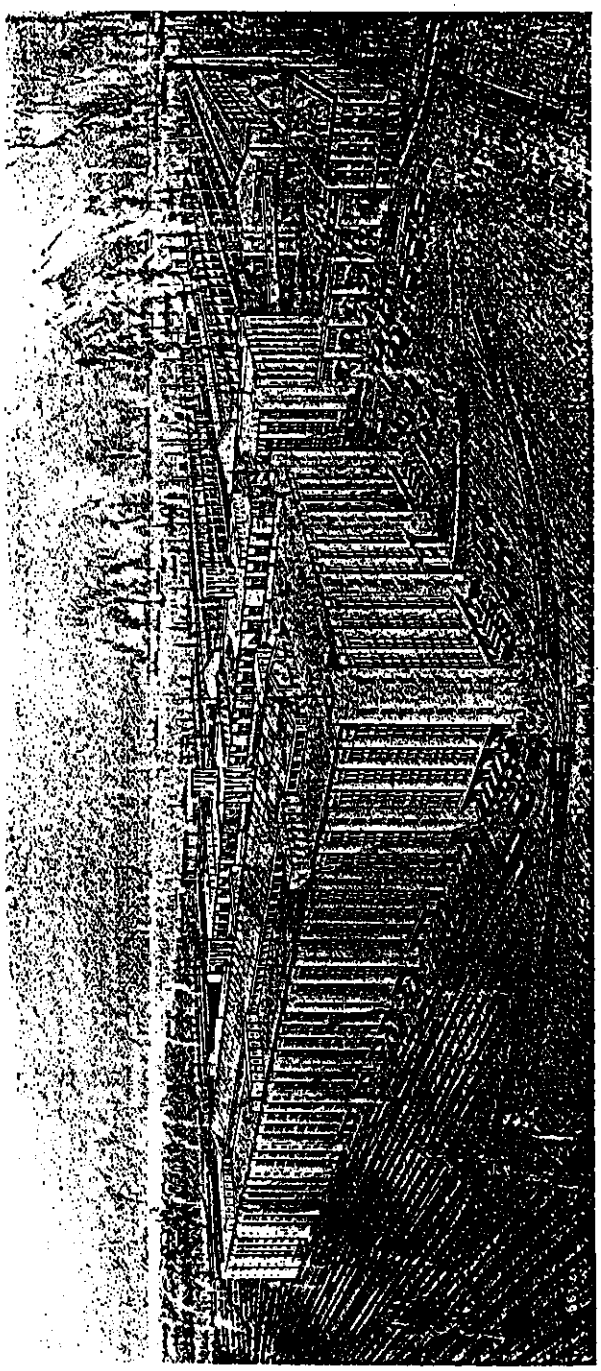


"General Layout: United States Army Supply Base, Brooklyn, New York City - Cass Gilbert, Architect." *The Architectural Review*, vol. 10, number 1 (January 1920): page 2.



East view of overall complex. Warehouse 'B' in foreground, with Warehouse 'A' and piers in background.
Design by Cass Gilbert, rendering by Hugh Ferriss, 1918.
New York Historical Society Collection.

COLLECTIONS
OF
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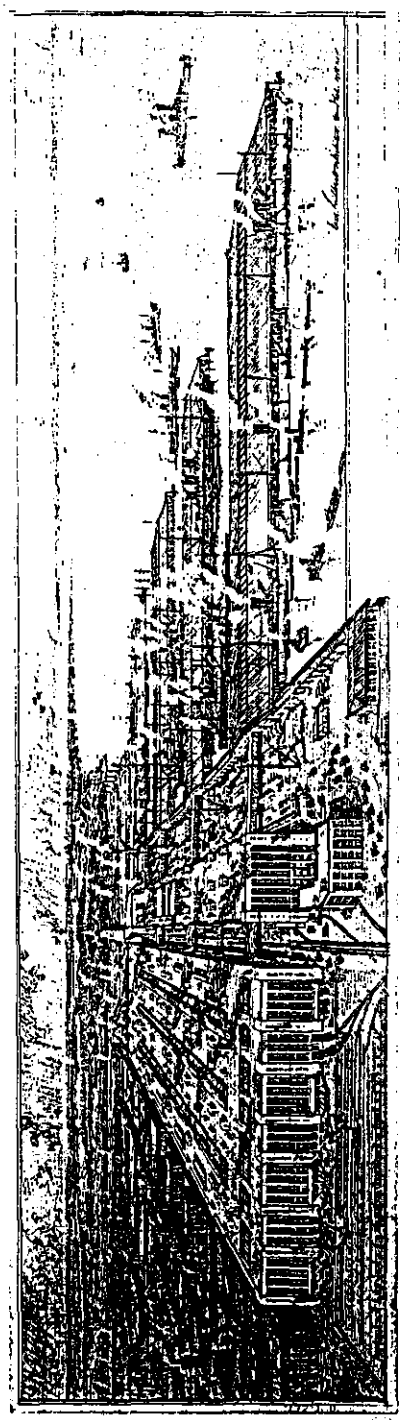
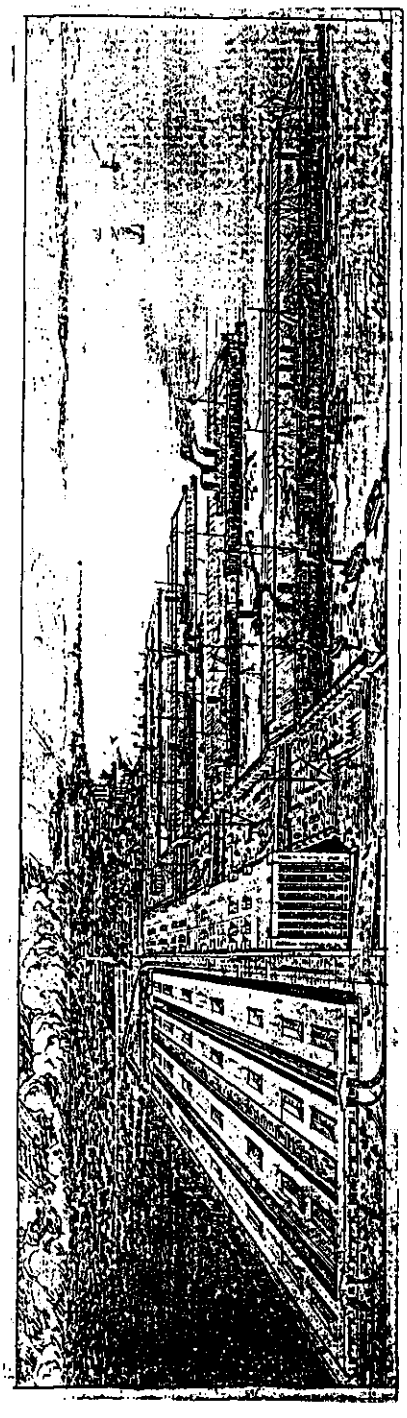
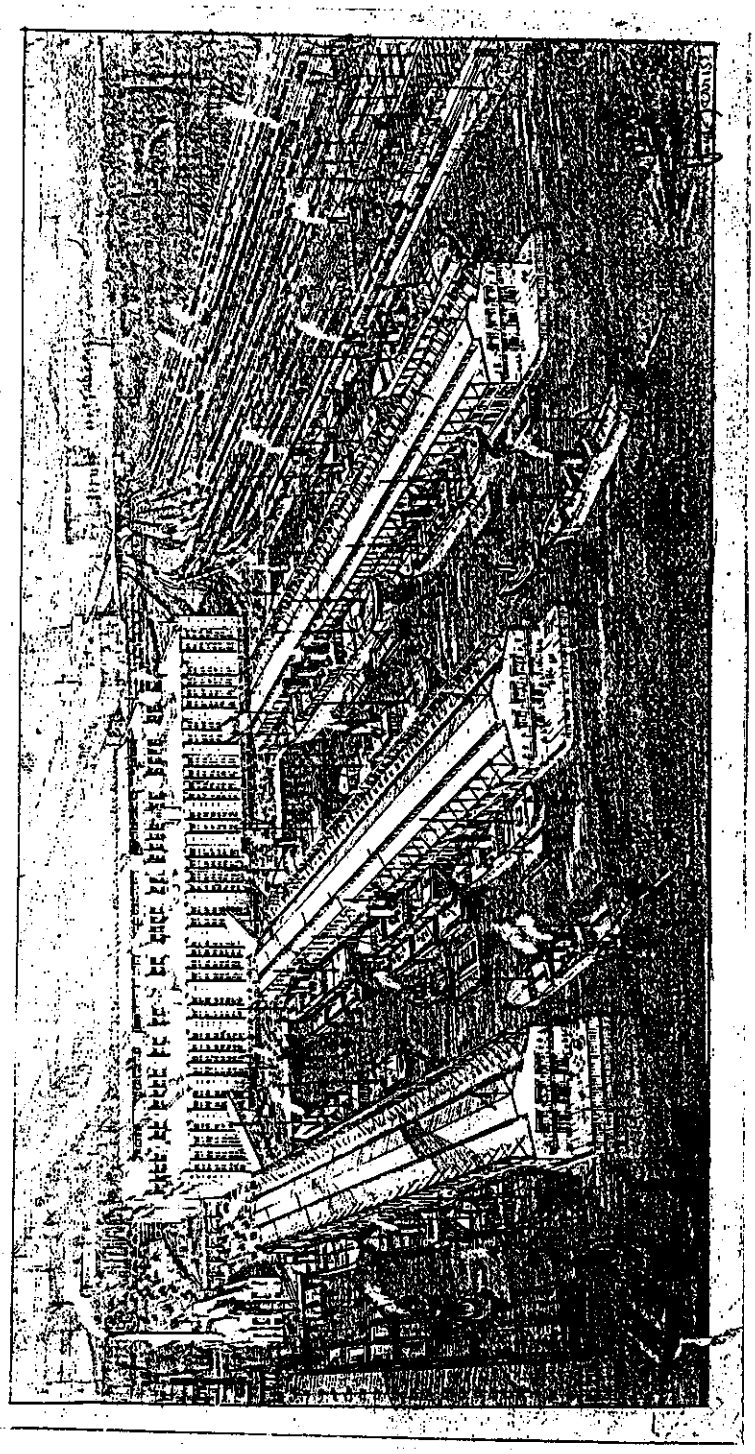


Northeast view of proposed design for terminal and piers.
Design by Cass Gilbert, rendering by Hugh Ferriss, February 4, 1918.
New York Historical Society Collection.

COLLECTIONS OF THE NEW-YORK HISTORICAL SOCIETY



Northeast view of proposed design for terminal and piers.
Design by Cass Gilbert, February, 1918.
New York Historical Society Collection.



COLLECTIONS
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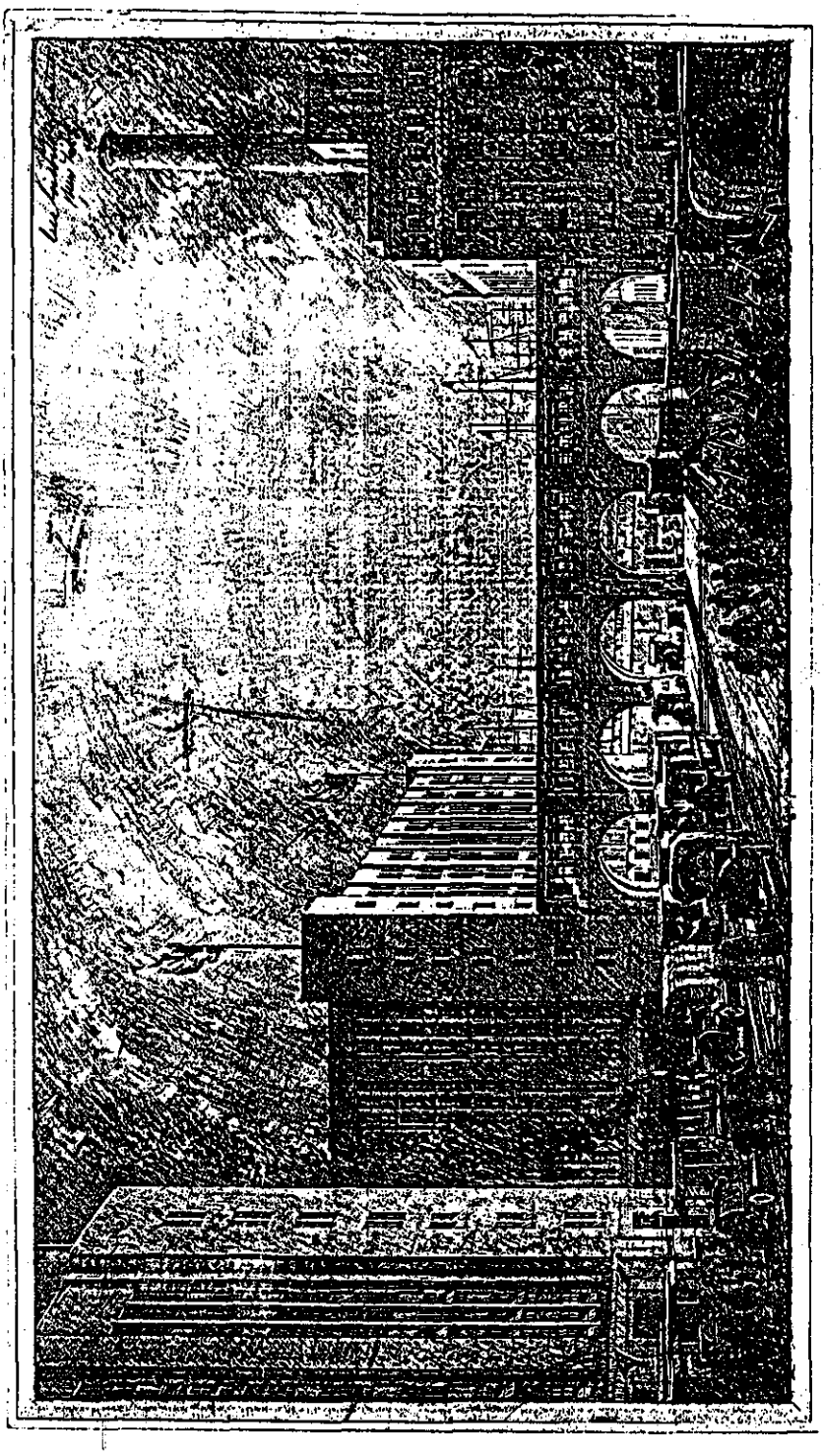
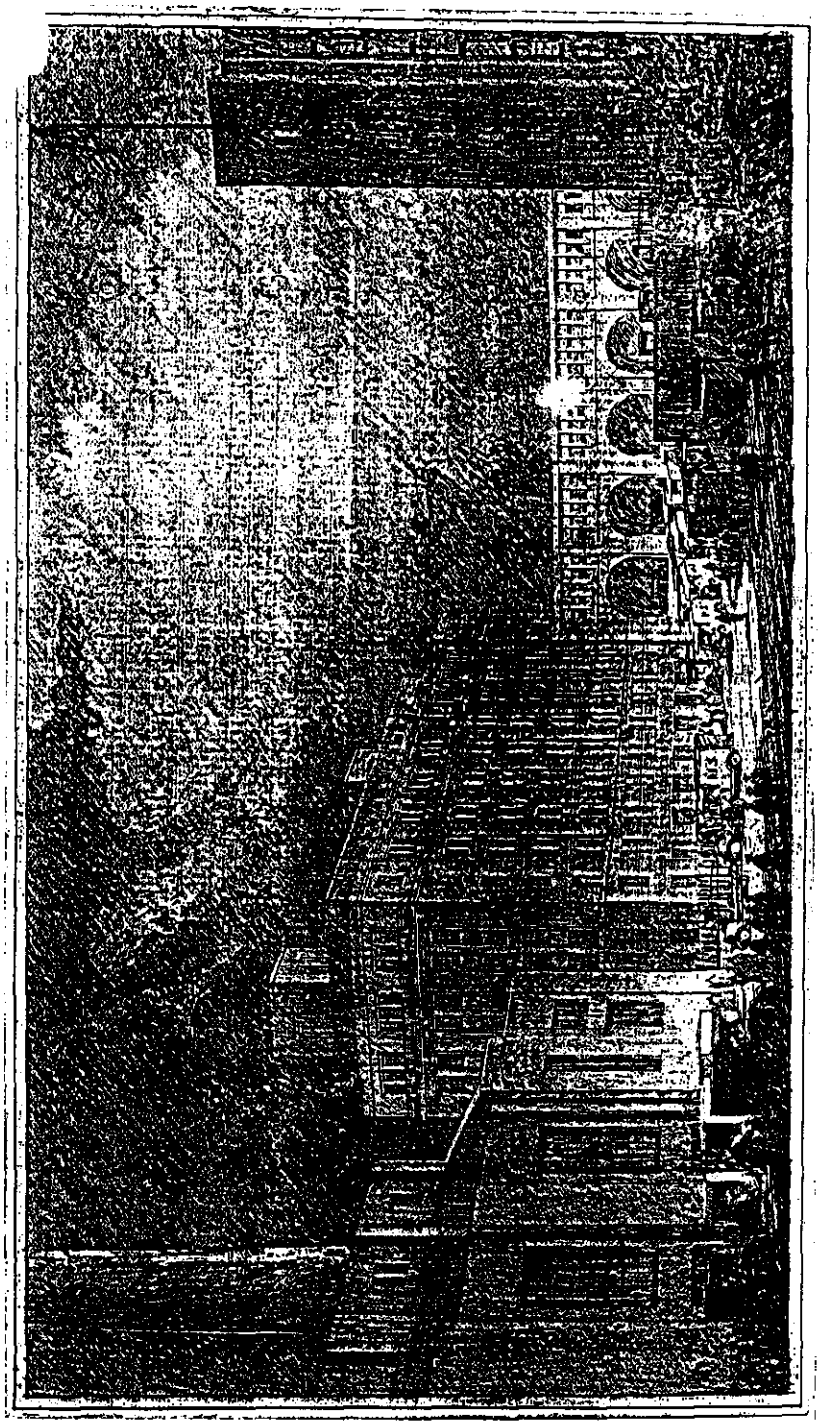
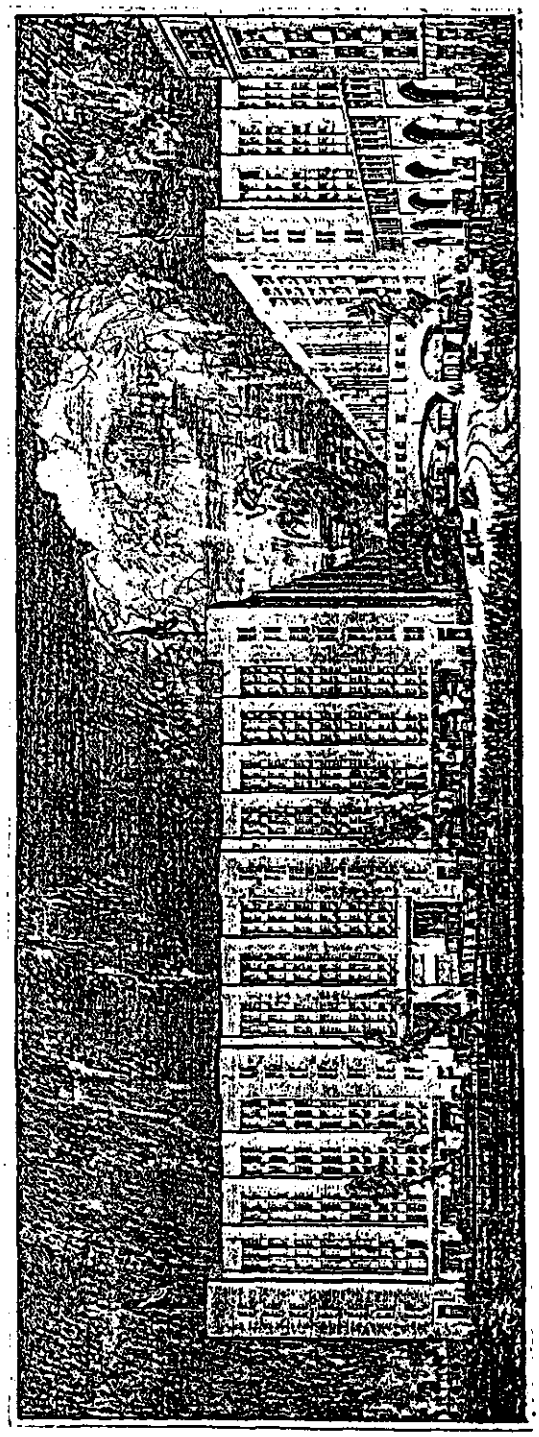
North view, with piers 4, 3, and 2 in foreground, and terminal in background.
Rendering by Hugh Ferriss, date unknown.
New York Historical Society Collection.



Southeast view toward the waterfront area, with Warehouse 'A' connecting with Administration Building.
Design by Cass Gilbert, rendering by Hugh Ferriss, 1918.
New York Historical Society Collection.

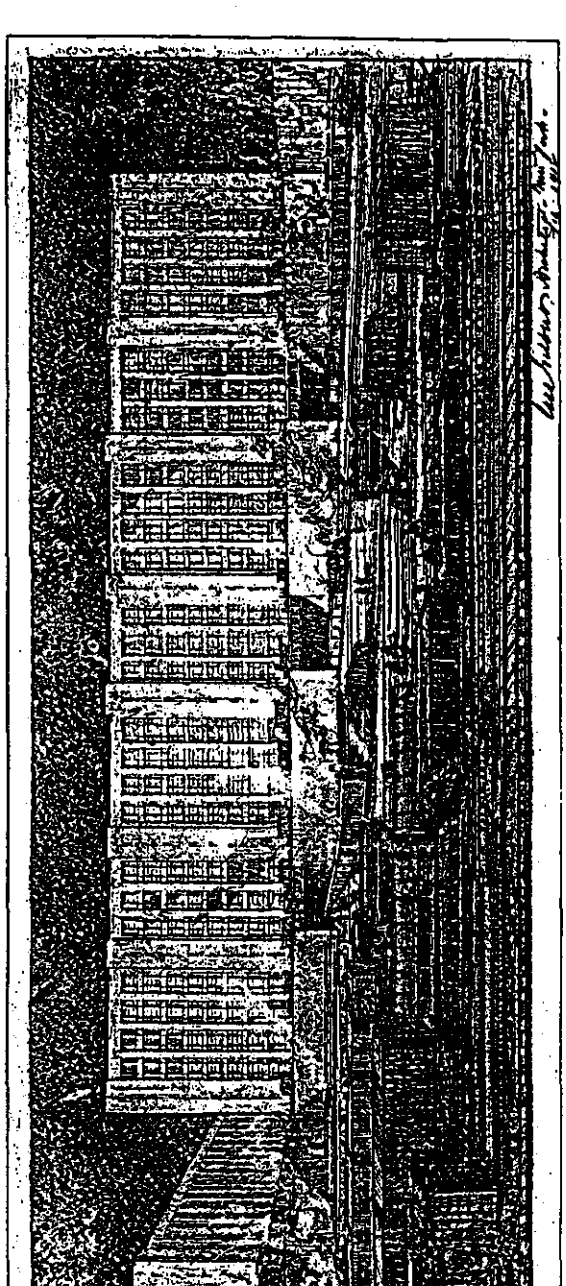


North view looking from water to complex. Boiler House, Administration Building, and bridge connecting to Warehouse 'A'.
Design by Cass Gilbert, rendering by Hugh Ferriss, 1918.
New York Historical Society Collection.



COLLECTIONS
OF
THE NEW-YORK HISTORICAL
SOCIETY

Northeast view of Warehouse 'B' and 'A', showing trucks and rail system loading and unloading cargo.
Design by Cass Gilbert, rendering by Hugh Ferriss, 1918.
New York Historical Society Collection.



Southeast view of Warehouse 'B', showing in foreground loading and unloading from piers using rail system.
Design by Cass Gilbert, rendering by Hugh Ferriss, February, 1918.
New York Historical Society Collection.

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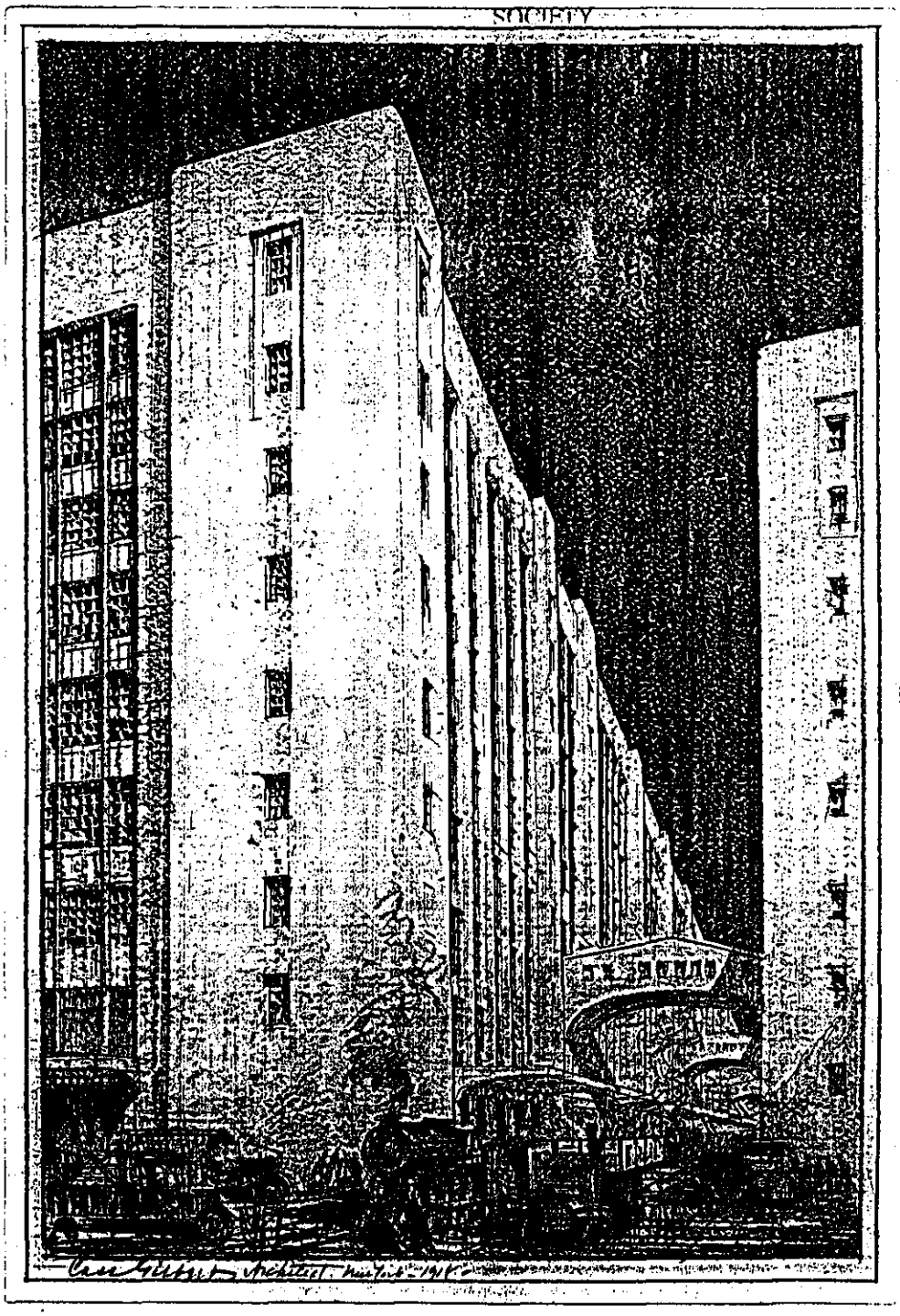
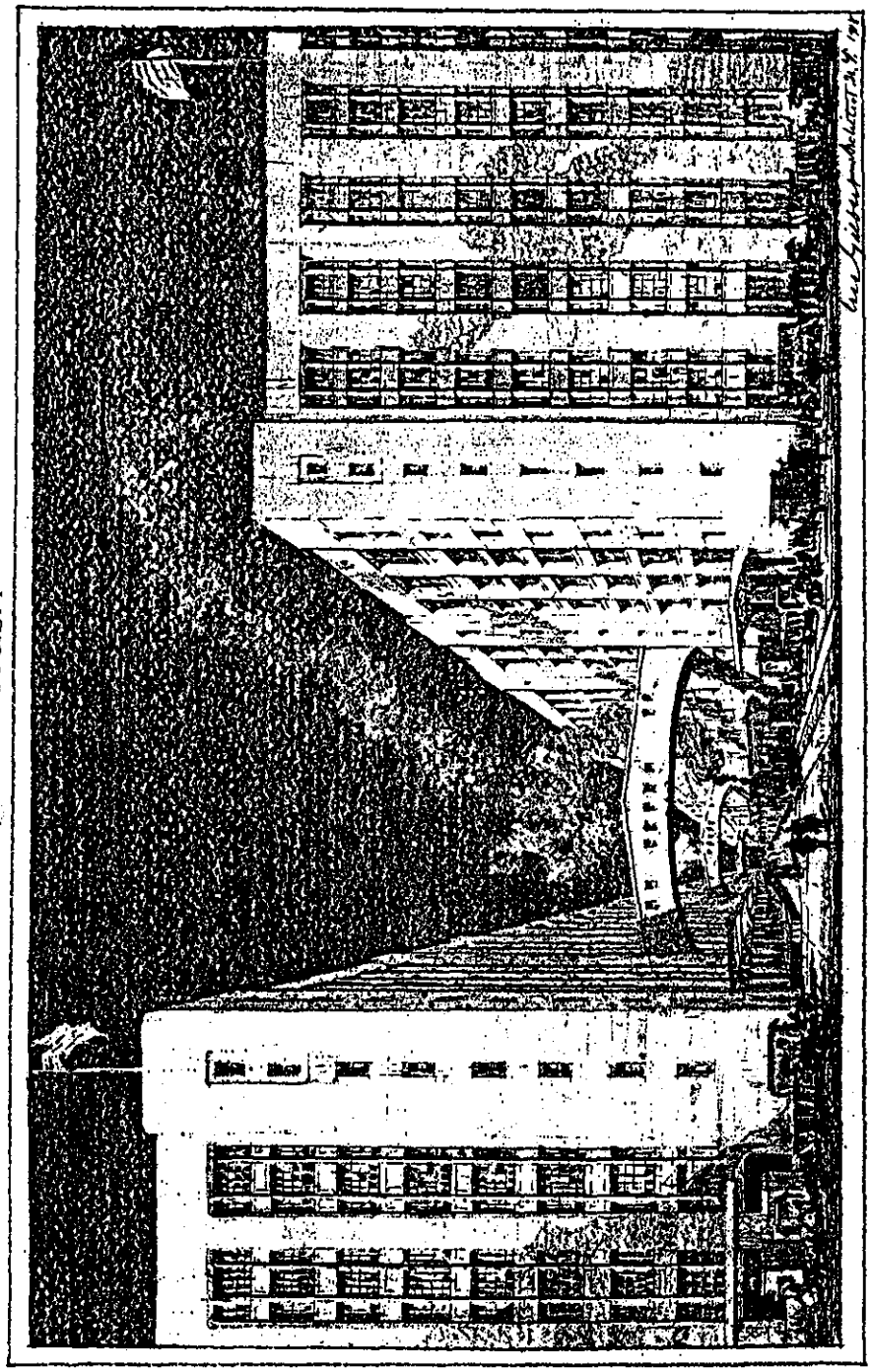


Connection between Warehouse 'A' and Warehouse 'B'. Train and trucks in foreground.
Design by Cass Gilbert, rendering by Hugh Ferriss, 1918.
New York Historical Society Collection.



Connection between Warehouse 'A' and Warehouse 'B'. Train and trucks in foreground.
Design by Cass Gilbert, rendering by Hugh Ferriss, 1918.
New York Historical Society Collection.

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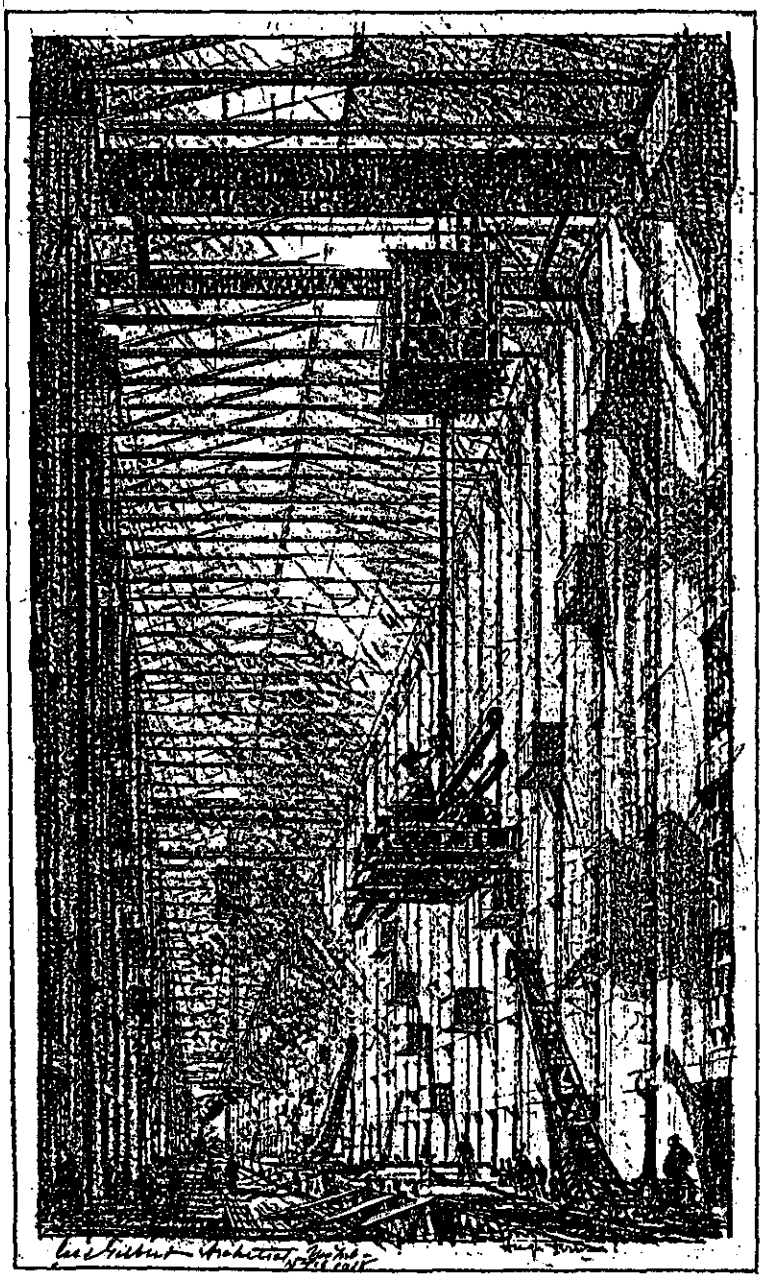
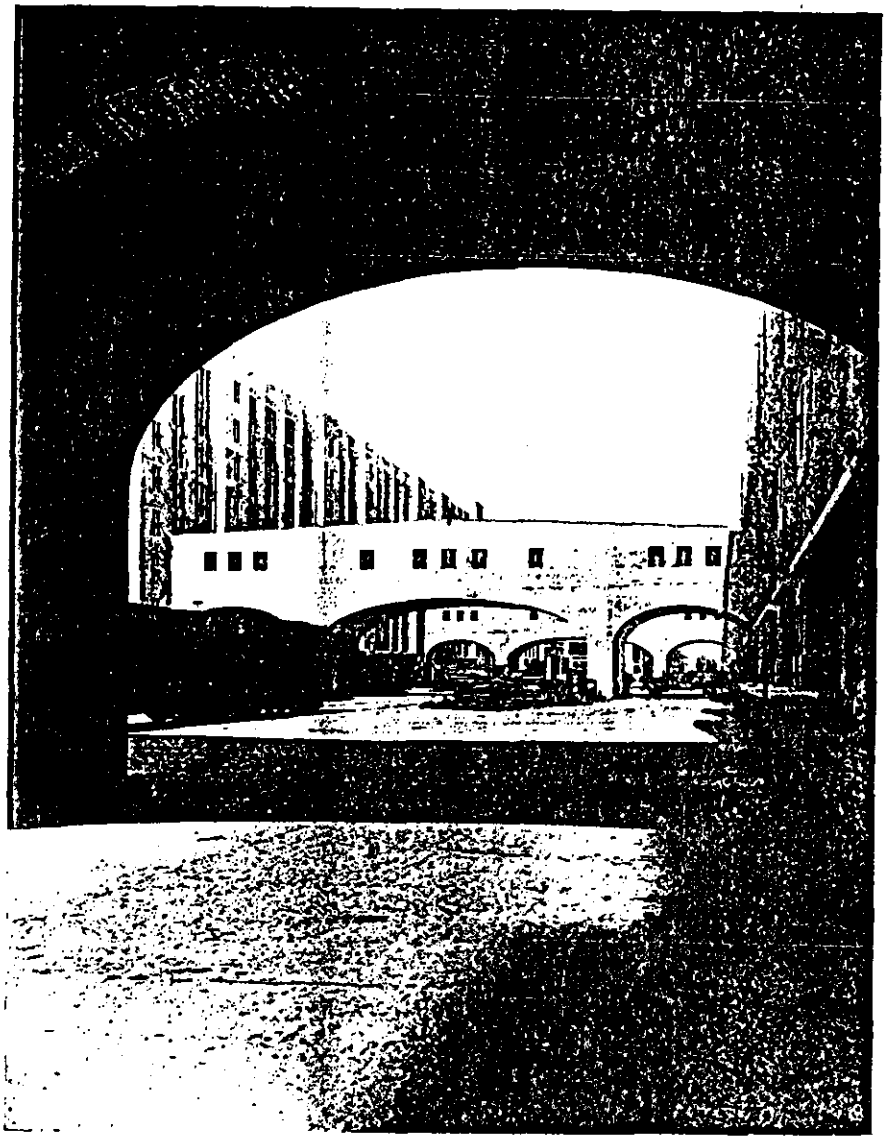


Atrium view of Warehouse 'B', showing transport of cargo.
Design by Cass Gilbert, rendering by Hugh Ferriss, February 15, 1918.
New York Historical Society Collection.

·THE·ARCHITECTURAL·REVIEW·
VOL. X, No. 1 PLATE I

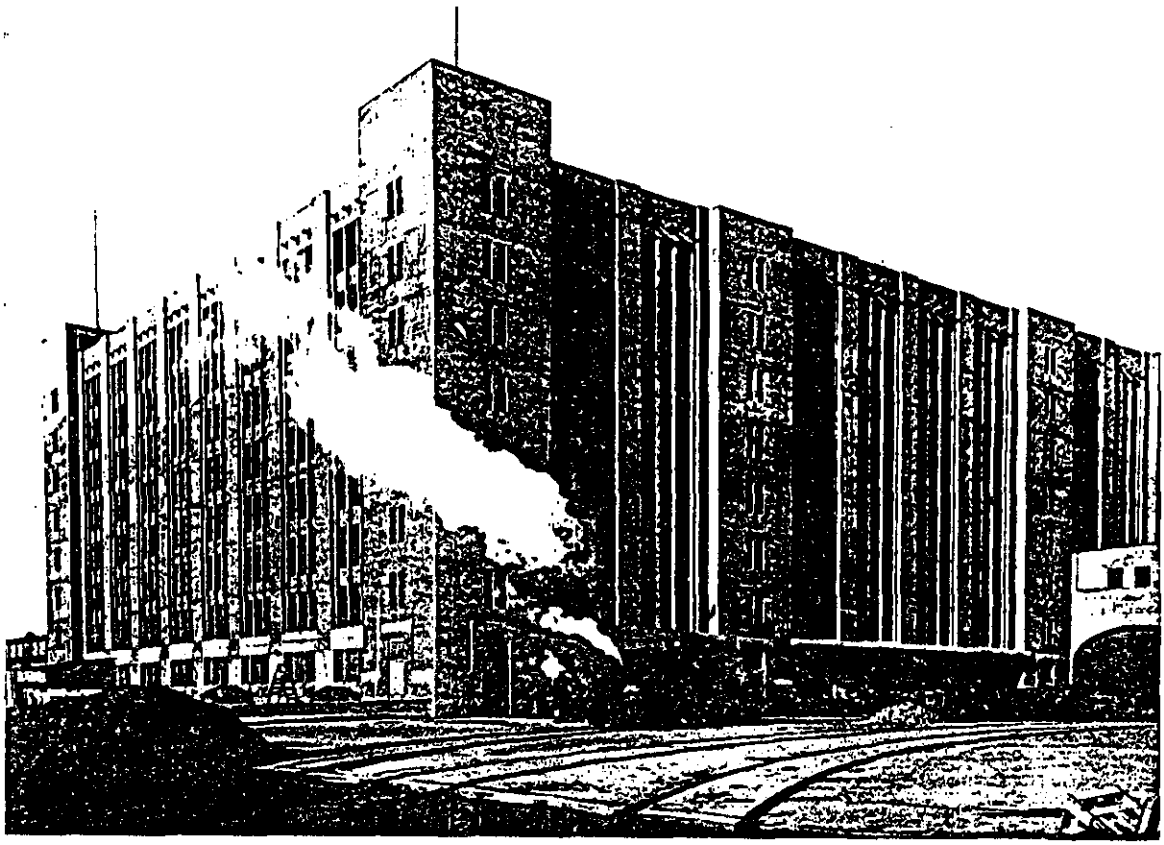


UNITED STATES ARMY SUPPLY BASE, BROOKLYN, NEW YORK CITY
CASS GILBERT, ARCHITECT

Bridges connecting Warehouse 'B' and Warehouse 'A'.
"United States Army Supply Base,
Brooklyn, New York City - Cass Gilbert, Architect."
The Architectural Review, vol. 10, number 1 (January 1920): plate I.

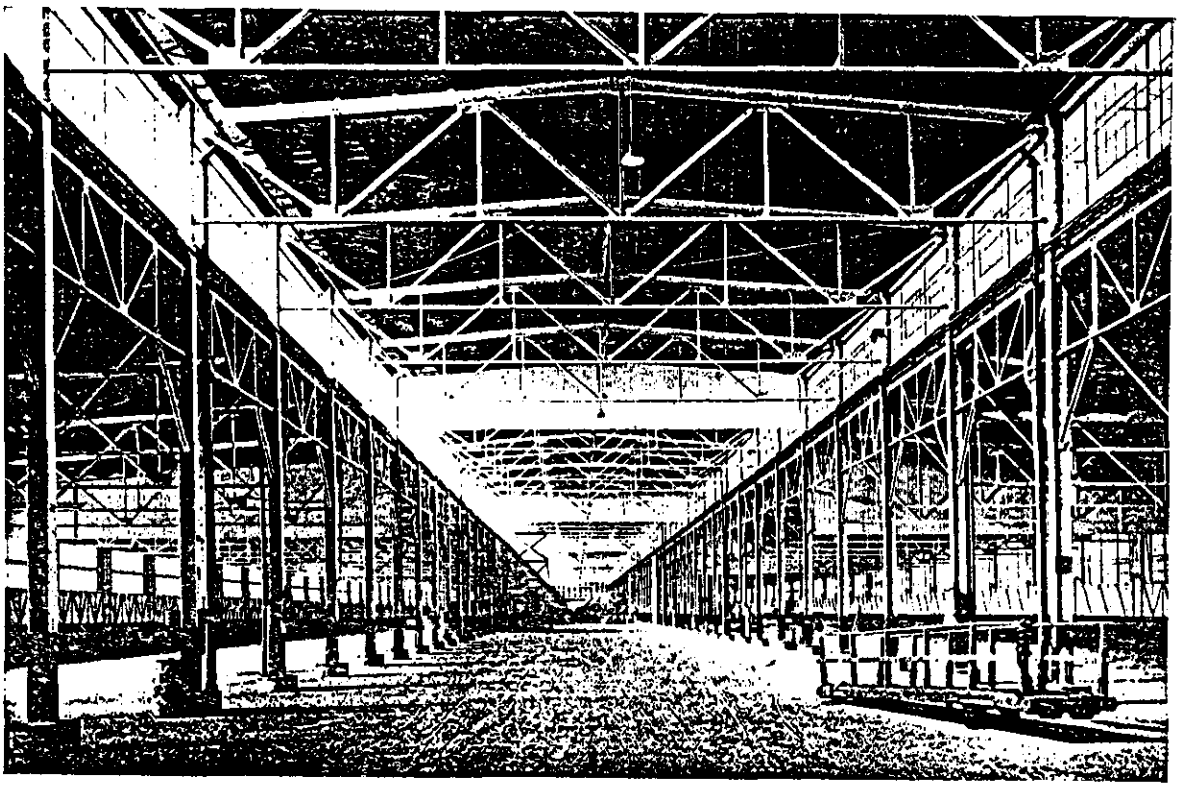
·THE·ARCHITECTURAL·REVIEW·

VOL. X, No. 1 PLATE II



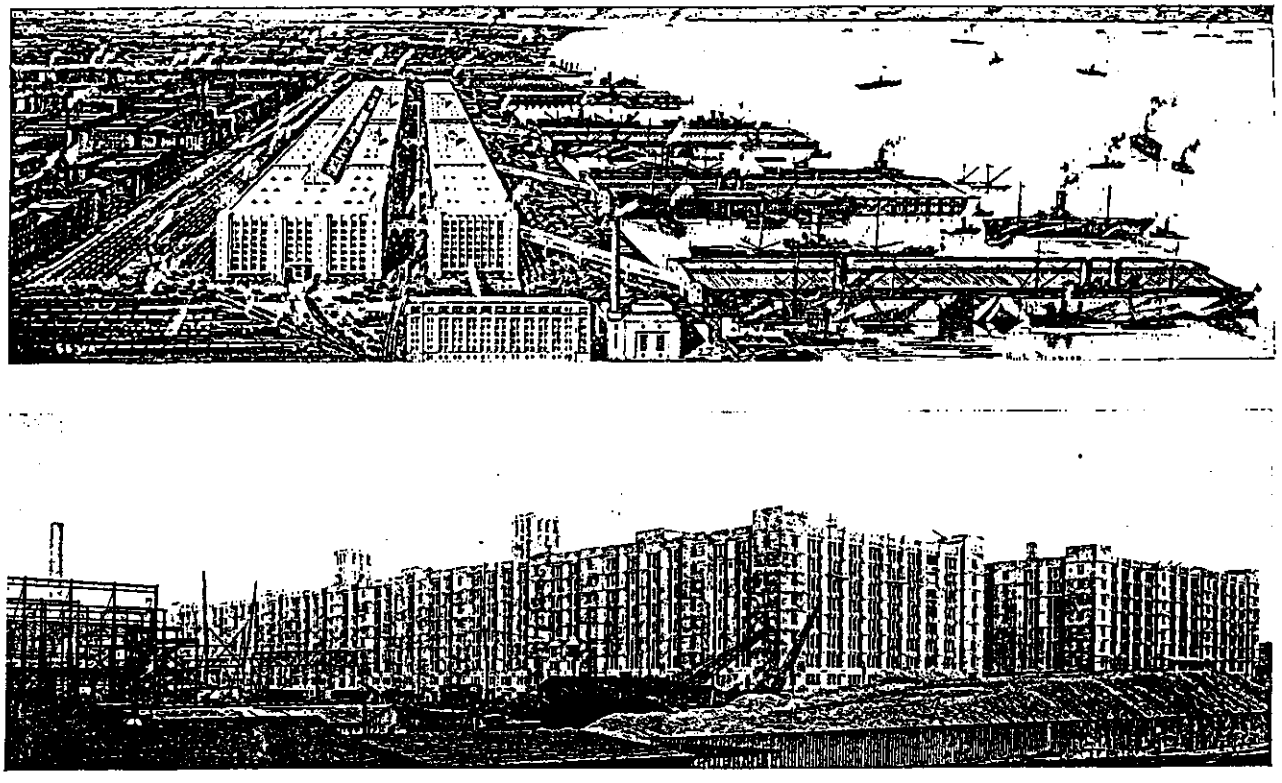
UNITED STATES ARMY SUPPLY BASE, BROOKLYN, NEW YORK CITY
CASS GILBERT, ARCHITECT

Warehouse 'A', Southeast view.
"United States Army Supply Base,
Brooklyn, New York City - Cass Gilbert, Architect."
The Architectural Review, vol. 10, number 1 (January 1920): plate II.



SECOND DECK OF ONE OF THE PIERS
UNITED STATES ARMY SUPPLY BASE, BROOKLYN, NEW YORK CITY
CASS GILBERT, ARCHITECT

"Second Deck of One of the Piers: United States Army Supply Base, Brooklyn, New York City - Cass Gilbert, Architect."
The Architectural Review , vol. 10, number 1 (January 1920): page 4.



ARCHITECTURE AND BUILDING. Plate 76.
Built by Turner Construction Co.; plumbing contractor—G. J. Staats; ventilators—Meuser Bros. Co., Inc.; Cheesman & Elliott paints used on buildings and piers; concrete piles—Raymond Concrete Pile Co.

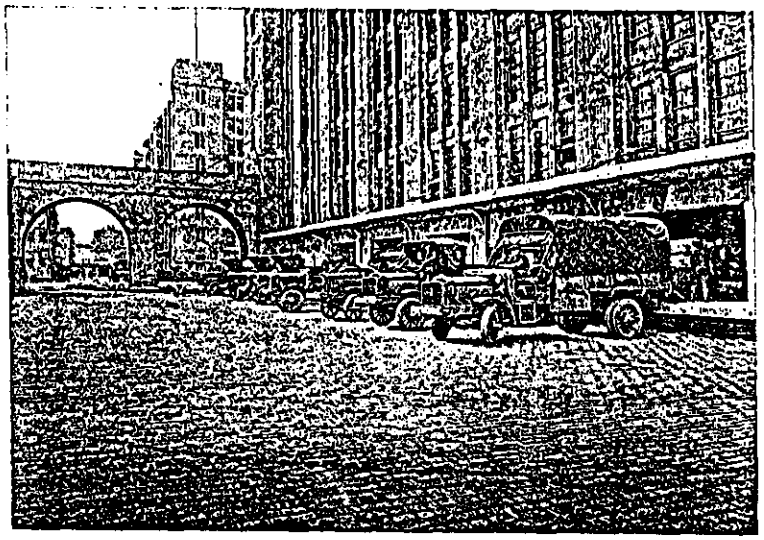
WATSON COLLECTION

UNITED STATES ARMY SUPPLY BASE, UPPER VIEW SHOWING PIERS, SOUTH BROOKLYN, NEW YORK.
Cass Gilbert, Architect.

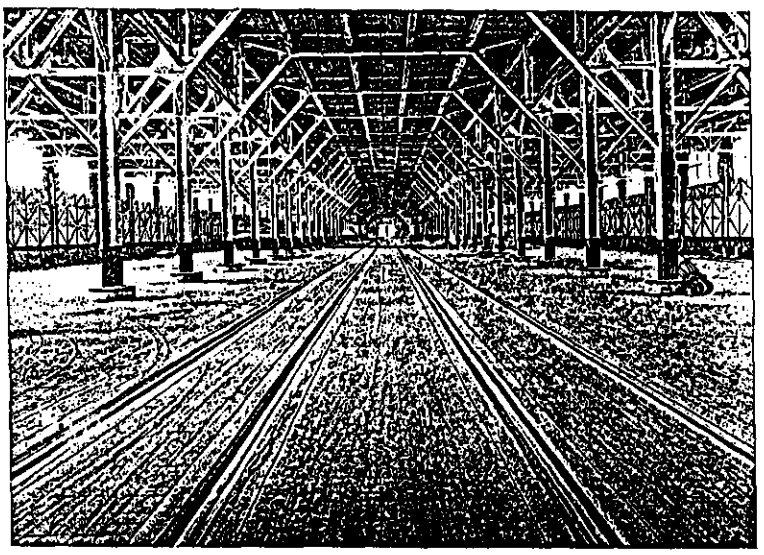
LONG ISLAND HISTORICAL SOCIETY

top half:
"United States Army Supply Base Upper View Showing Piers, South Brooklyn, New York-Cass Gilbert, Architect." Rendering by Hugh Ferriss.
Architecture and Building, plate 76, no date.
Watson Collection/Brooklyn Historical Society Collection.

bottom half:
Northwest view of terminal.
Architecture and Building, plate 76.
Watson Collection/Brooklyn Historical Society Collection.



TOP OF GARAGE AND LOADING PLATFORMS, NORTH END OF BUILDING A, UNITED STATES ARMY SUPPLY BASE, SOUTH BROOKLYN, NEW YORK.



PIER NO. 4, LOWER DECK, UNITED STATES ARMY SUPPLY BASE, SOUTH BROOKLYN, NEW YORK. Cass Gilbert, Architect.

ARCHITECTURE AND BUILDING. Plate 77.
Built by Turner Construction Co.; asphalt blocks—Hastings Pavement Co.; sheet metal work and skylights—Herrmann & Grace Co.; Savage Expansion Bolts used; sprinkler system—Rockwood Sprinkler Co.

"Top of Garage and Loading Platforms, North end of Building 'A', United States Army Supply Base, South Brooklyn, New York."
Architecture and Building, plate 77, no date.
Watson Collection/Brooklyn Historical Society Collection.

"Pier No. 4, Lower Deck, United States Army Supply Base, South Brooklyn, New York-Cass Gilbert, Architect."
Architecture and Building, plate 77, no date.
Watson Collection/Brooklyn Historical Society Collection.

ARMY BASE

June 14, 1918.

I concur in this recommendation but under the written instructions of the Construction Division the design should be made of wood purlins. I have verbally protested against this. I wish also to submit for their consideration an alternative for pre cast concrete purlins and roof slabs.

C. G.

CONSULTATIONS
DESIGNS
EXAMINATIONS
REPORTS
STRUCTURAL STEEL
REINFORCED CONCRETE
FOUNDATIONS
CASS GILBERT
ARCHITECT
RECEIVED
JUN 7 - 1918
ANS'D 19

CASS GILBERT
ARCHITECT
RECEIVED
JUN 7 - 1918
ANS'D

With reference to the Pier Sheds of the Army Supply Base you told us that you have been advised of the decision to make the roof construction wood purlins and sheathing. We urgently recommend that this matter be reconsidered, if possible, in favor of pre-cast reinforced concrete purlins and roof slabs as shown by sketch herewith.

Our argument for the adoption of such construction in lieu of wood is not only that it will at least retard a possible fire and practically insure against the spread of fire from one pier to another or to ships alongside, but also that the placing of the pre-cast concrete roof will require less time and labor.

As regards the cost, we have inquired of the "Pre-Cast Concrete Company" and they have advised us that their price for the purlins and slabs in place complete, ready for the gravel roof covering, would probably not exceed (.45) forty-five cents per square foot which seems reasonable.

We strongly recommend that such roof construction be

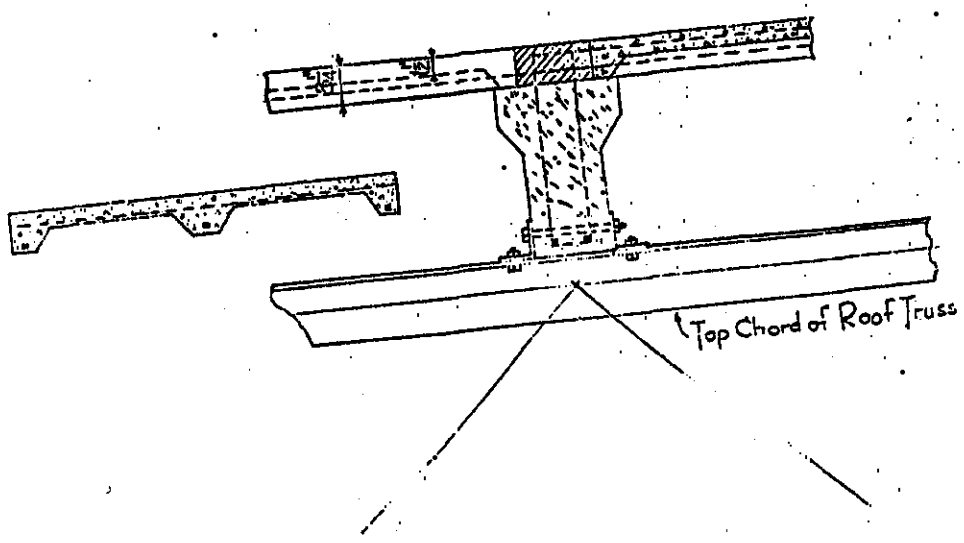
Letters: regarding Pier Shed Roofing, written by Cass Gilbert; June 14, 1918 (top half), to Cass Gilbert, written by Gunvald Aus Company; June 7, 1918 (bottom half), page 1 of 2.
New York Historical Society Collection.

sideration so that we may complete the design of the steel trusses at the earliest possible moment.

Very truly yours,

GUNVALD AUS COMPANY.

Karl Berle.



Letters: regarding Pier Shed Roofing, to Cass Gilbert/written by Gunvald Aus Company, June 7, 1918: page 2 of 2.
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June 28, 1918.

MEMORANDUM

CR.E

TO: The Constructing Quartermaster.

FROM: Construction Division, Construction Branch.

SUBJECT: Army Supply Base, Brooklyn, N.Y.

1. At a meeting in the office of Lt.Colonel Bush on Thursday, June 27th, 1918. the following items were discussed and decisions reached as follows:

2. Referring to letter from Mr. Cass Gilbert to Major Crooker dated June 21st, with reference to railroad tracks in relation to the piers. It was decided that the 300 ft. radius should be maintained and that columns of pier shed were to be moved to permit proper clearance where curve extended on to the piers.

3. Track layout of the East and South of the project to be studied and report to be made at the meeting on Thursday next, in the office of Lt. Colonel Bush.

4. Drawings to be revised to show pier sheds extended to the center line of the first double bent of piles back from end of piers.

5. Arrangement of pier No. 1 to be as follows: To be 60 feet in width, and to be provided with 2 railroad tracks, 18 feet center to center, the tracks on the water side of the pier to be 12 feet from center of track to the edge of the pier, and the pier to be designed for locomotive loads.

Pier to be paved with blocks, of make to be determined later, and paving to be graded so that it will be flush at the top of the rails so as to permit trucking over the entire width.

6. Property lying between Third and Fourth Ave., and along 65th Street, to be condemned at once for necessary track facilities, Colonel Shelby's office has been notified and necessary action has begun.

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7. All paving to be in accordance with the original program, i.e. concrete unless data to be furnished by Mr. Gilbert with reference to costs and upkeep shows more favorable reference to paving blocks as a substitute for concrete. The space between building A and bulkhead line to be paved with brick or some other smooth surfaced paving material on a concrete base. Material recommended for paving to be submitted to the Construction Division for approval.

8. There will be no cranes used on piers Number 1, other than locomotive cranes, and there will be no electric power required on this pier other than for necessary electric lighting. There will be no stationary cranes provided in space between buildings A and bulkhead line.

9.

9. Space for barracks, guards and stevedore regiments, will not be provided on the piers. Drawings are now being perfected to provide suitable accommodations for these men on land adjacent to the project. Mr. Gilbert is to locate suitable quarters for first aid cases in the buildings, cases are to be sent to city or other public hospitals or to infirmaries in guard or stevedore regiment camps as may be determined by the Surgeon General who now has this matter under consideration.

10. a- Power plugs for tiering machines are not to be provided on the piers.

b- Scale pits in buildings A and B to be located East of each elevator bank. Pits only to be installed at this time and opening floored over, pending the installation of the scales. Mr. Gilbert to work out program for placing other scales and submit layout to the Construction Division.

c- Scheme showing new location of boiler room and Administrative building as submitted by Mr. Gilbert, was approved. Necessary drawings to be prepared at once.

d- Study for dining rooms, toilet rooms, etc., for Administrative forces to be prepared by Mr. Gilbert and submitted for approval.

e- Contracts for elevators to be submitted to the Construction Division for examination by the Legal Department.

f- Both electric and steam locomotives to be provided for switching purposes, electric locomotive to be of storage battery type and used for handling cars inside the buildings.

g- The Signal Corps desires wireless towers and room for operator as a part of the project, data for the same to be obtained from the Electric Engineering Section of Land Division, of Signal Corps, who will also furnish information with reference to telephone facilities for this project.

Memorandum: to the Constructing Quartermaster,
from Construction Division, June 28, 1918,
page 2 of 3.
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h- Plumbing and heating plans are being checked and will be available shortly.

i- Arrangements of office facilities for Administrative force to be taken up with Colonel Welle, and determined as soon as possible.

j- Mr. North to confer with Mr. Morrie on the completion of layout for the open storage tracks, layout to be submitted to Mr. Gilbert for his inspection and then referred to Lt.Colonel Bush for presentation to Mr. Felton.

R. C. Marshall, Jr.

Colonel Q. M. Corps, N. A.,
In Charge of Construction Division.

BY: (Sig.) Clinton H. Fisk.

Major, Q.M.Corps, N.A.

CHF/GWC/B

Memorandum: to the Constructing Quartermaster,
from Construction Division, June 28, 1918,
page 3 of 3.
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INDIVIDUAL PROJECT ESTIMATE—REPAIRS AND UTILITIES

DATE	7 February 1955
FISCAL YEAR	1955

INSTALLATION	POST REQUEST NO.	ARMY SERIAL NO.	ARMY REQUISITION NO.	DETAIL ACCOUNT NO. (J)
NEW YORK PORT OF EMBARKATION-BROOKLYN ARMY BASE	23-55		-	3532.2

1. PROJECT DESCRIPTION (Attach plans, specifications, maps, photographs, etc.)

This work consists of repairs to the Government-owned piers and bulkhead at this installation, as follows:

Pier 3 - Reconstruct fenders and outer end, repair substructure using timber piles and framing, concrete deck repairs, cargo doors repairs and related repairs.

Bulkhead Between Piers 3 & 4 - Reconstruct fender system and perform related repairs.

(This project is further detailed on plans) No. Drawing File No. 7404 - 201 & 202 (Two) 2 Sheets

2. PROJECT JUSTIFICATION

See attached Project Justification.

3. FACILITIES DATA

DESIGNATION	PRESENT ESTIMATED VALUATION	PRESENT USE
Pier No. 3, and Bulkhead Between Piers No. 3 & 4, Brooklyn Army Base, Brooklyn, NY	$	- Docking of Vessels

4. LEASED FACILITIES DATA

LOCATION	OCCUPIED BY		
LEASE NO.	ANNUAL RENTAL	MAINTENANCE RESPONSIBILITIES	TOTAL AMOUNT OF CERTIFICATES OF NECESSITY ISSUED TO DATE
	$	☐ GOVERNMENT ☐ LESSOR	$

5. ESTIMATED TIME TO COMPLETE PROJECT: 180 calendar days

6. PROJECT TO BE ACCOMPLISHED BY: ☐ POST ENGINEER ☒ OTHER Dist. Engr. METHOD: ☐ POST ENGINEER ☒ CONTRACT ☐ OTHER

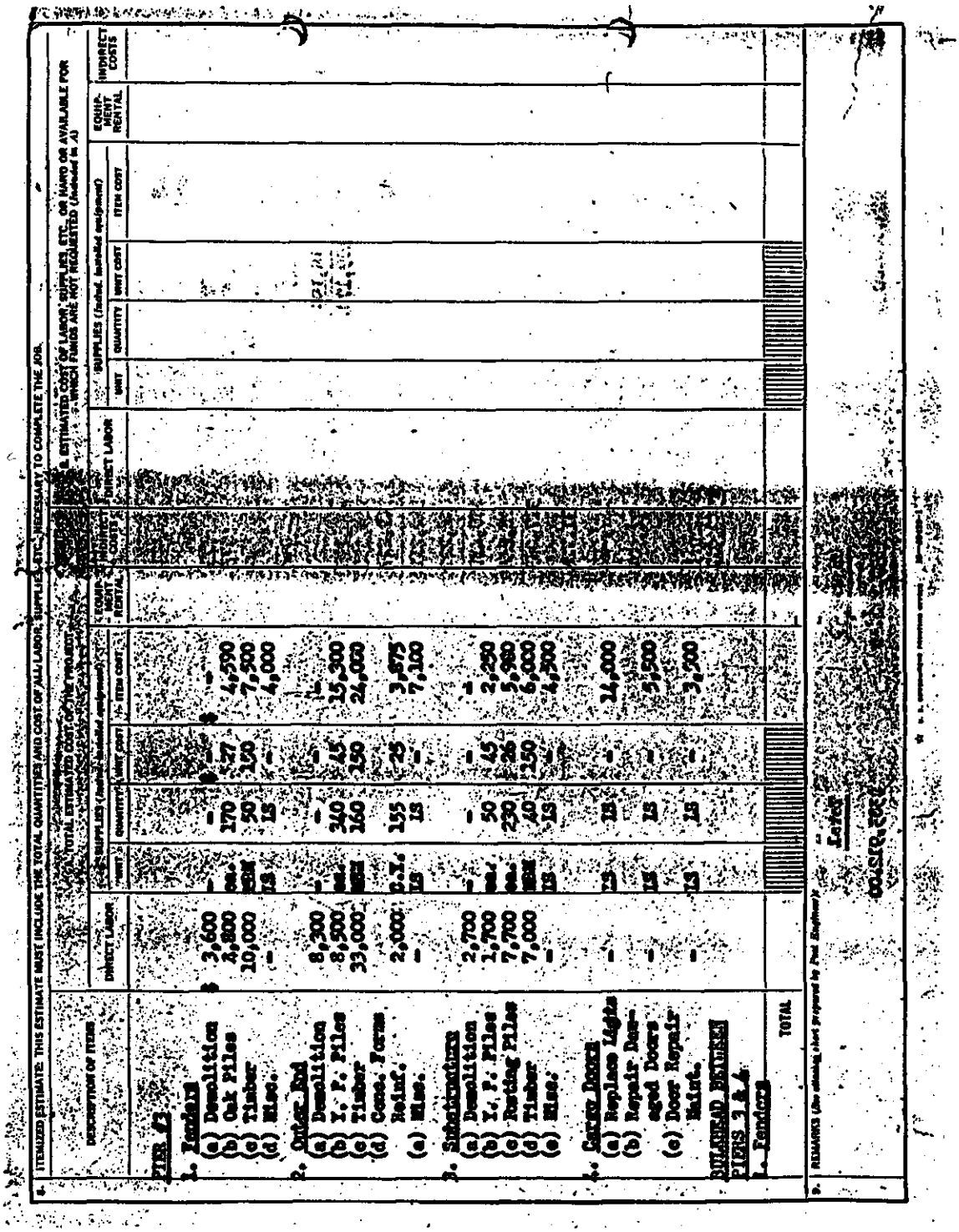
7.

	LABOR	ALL OTHER	TOTAL
ESTIMATED TOTAL COST OF PROJECT PER PAR. 8A (See reverse side)	$ -	$ -	$ 383,912.00
LESS VALUE OF PAR. 8B (See reverse side)	$ -	$ -	$ -
TOTAL ADDITIONAL FUNDS REQUIRED TO COMPLETE PROJECT	$ -	$ -	$ 383,912.00

SUBMITTED BY	APPROVED BY
7 February 1955 (DATE) MALIE G. GEORGIA, Lt.Col., CE, CHIEF ENGINEER	(DATE) ROBERT C. HANES, Col., GS, Asst C/S, G-4 INSTALLATION COMMANDER

DA AGO FORM 1 AUG 49 5-25 THIS FORM SUPERSEDES WD AGO FORM 5-25, 1 AUG 1944, AND WD AGO FORMS 5-26, 1 MAR 1945, WHICH MAY BE USED.

DA AGO Form 5-25, "Individual Project Estimate - Repairs and Utilities"
for New York Port of Embarkation - Brooklyn Army Base, Request no. 23-55, Detail Acct. no 3532.2,
February 7, 1955: page 1 of 3.
On file at the New York City Economic Development Corporation.



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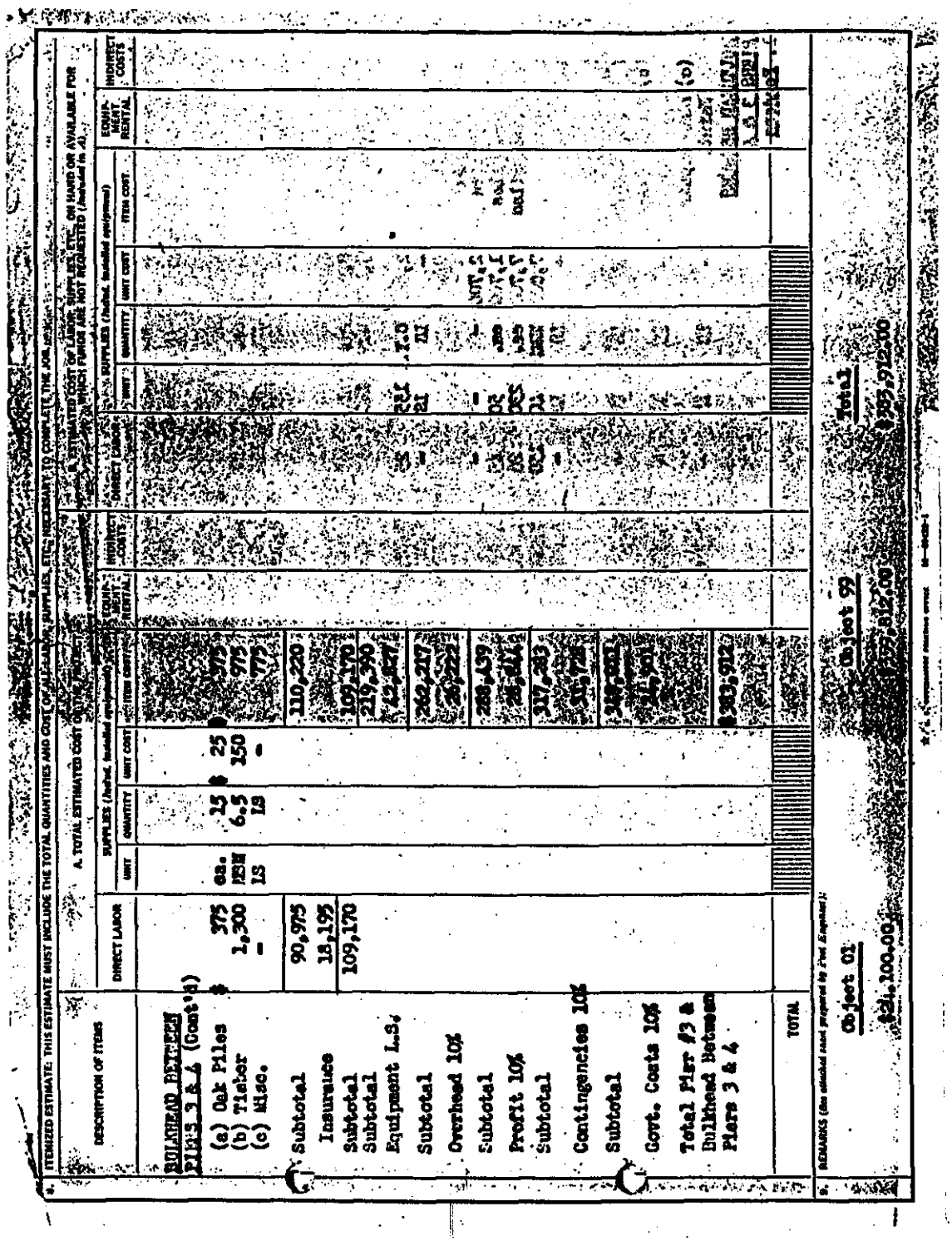

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